

## PATENT ABSTRACTS OF JAPAN

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## (54) POLYETHER ESTER-BASED ELASTIC YARN

## (57) Abstract:

PURPOSE: To obtain the subject yarn having plural protrusions with not thick tips in a cross section, excellent elasticity recovery and combining properties, comprising polyethylene terephthalate, etc., as a hard segment and a straight-chain polyalkylene glycol as a soft segment.

CONSTITUTION: Dimethyl terephthalate is esterified with ethylene glycol or 1,4-butanediol and is subjected to polycondensation with a polyalkylene glycol to give a polyether ester comprising a polyester composed of polyethylene terephthalate or polybutylene terephthalate as a hard segment and a straight- chain polyalkylene glycol as a soft segment. The polyether ester is spun from spinning holes having protrusions not enlarging toward tips and drawn to give the objective elastic yarn having 3-5 protrusions not enlarging toward tips and a ratio cross-sectional area) of ≥1.5.



of deformation M=S1/S2 (S1 is area of part enclosed by lines connecting tips of protrusions; S2 is

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